

### ABSTRACT

Apparatus, and an associated method, for facilitating selection of antenna pattern characteristics to be exhibited by an antenna assembly of a communication station, such as a base transceiver station operable in a cellular communication system. Indications of channel conditions on an uplink channel are utilized in the determination of antenna weighting values by which to weight antenna weighting elements of the antenna assembly. In one implementation, an uplink channel correlation matrix is reformulated into vector form to reduce the computational complexity of calculations required to select the antenna weighting values. In another implementation, a discrete Fourier transform operation is performed using fast Fourier transform techniques to select the antenna weighting values.